Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An ionic conductor comprising:

a porous body which has a plurality of continuous pores passing through said porous body;

ionizable functional groups attached to all of the surfaces of said continuous pores; and

hydrophobic groups attached to the surfaces of said continuous pores, wherein said ionic conductor is a diaphragm.

2. (Previously Presented) An ionic conductor according to claim 1, wherein said porous body comprises a porous ceramic.

3. (Previously Presented) An ionic conductor according to claim 2, wherein said porous ceramic comprises a porous glass, a porous alumina, or a porous mullite.

4. (Original) An ionic conductor according to claim 1, wherein an average diameter of said continuous pores is in the range of 1 nm to 1 μm, and a porosity of said porous body is in the range of 5 to 90 %.

5. (Cancelled)

6. (Previously Presented) An ionic conductor according to claim 1, wherein said hydrophobic groups are alkyl groups or fluorocarbon functional groups.

7. (Previously Presented) An ionic conductor according to claim 1, wherein said porous body has a plate shape, a pipe shape, or a honeycomb shape.

8. (Withdrawn) A method of producing an ionic conductor, said method comprising:

preparing a porous body which has a plurality of continuous pores passing through said porous body; and

attaching ionizable functional groups to active groups being present on surfaces of said continuous pores by a covalent bond or a hydrogen bond.

9. (Withdrawn) A method of producing an ionic conductor, said method comprising:

preparing a porous body which has a plurality of continuous pores passing through said porous body;

bonding hydrophobic groups to active groups being present on surfaces of said continuous pores; and

attaching one of anionic surface active agents, cationic surface active agents, and amphoteric surface active

agents, each of which has ionizable functional groups and one of alkyl groups and fluorocarbon functional groups, to said hydrophobic groups.

Claims 10 - 12. (Cancelled)

13. (Previously Presented) An ionic conductor according to claim 1, further comprising surface active agents having said ionizable functional groups and attached to said hydrophobic groups.

14. (Previously Presented) An ionic conductor according to claim 4, wherein the average diameter of said continuous pores is in the range of 4 nm to 50 nm.

15. (Previously Presented) An ionic conductor according to claim 1, wherein said plurality of continuous pores extend from a surface to an opposite surface.

16. (Previously Presented) An ionic conductor according to claim 1, wherein said ionizable functional groups are $-SO_3^-$.

17. (Previously Presented) An ionic conductor according to claim 1, wherein said ionizable functional groups are $-N^+(CH_3)_3$.